

a large iceberg and several pieces of field-ice; s.s. "Brooklyn" saw several icebergs off Cape Race; last ice seen in N. 47° 24', W. 49° 26'; bark "Esmeralda," in N. 46° W. 50°, passed four small icebergs; s.s. "Salier," between N. 42° 16', W. 50° 42' and N. 42° 47', W. 47° 53', passed eleven large icebergs and some smaller ones.

28th.—S. S. "City of Chester," in N. 42° 11', W. 48° 49', passed an iceberg and several pieces of ice.

29th.—S. S. "Westphalia," in N. 41° 42', W. 47° 47', passed a large iceberg.

30th.—S. S. "Alaska," in N. 43° 37', W. 48° 03', passed an iceberg, also in N. 43° 27', W. 48° 17' passed another; s. s. "Weser," in N. 41° 30', W. 47° 30', passed a small iceberg.

June 1st.—S. S. "Furnessia," in N. 43° 01', W. 49° 43', passed an iceberg; s. s. "Nürnberg," between N. 42° 56', W. 48° 11' and N. 42° 54', W. 48° 32', passed several icebergs.

2d.—S. S. "Pieter de Coninck," in N. 44° 34', W. 49° 10', passed an iceberg.

5th.—S. S. "City of Rome," in N. 44° 36', W. 47° 35', passed two large icebergs; s. s. "Critic," in N. 41° 30', W. 48° 51', passed several icebergs.

6th.—S. S. "Grecian Monarch," in N. 46° 23', W. 50° 27', passed two icebergs and several pieces of ice; s. s. "Brooklyn City," in N. 44° 06', W. 55°, passed a large iceberg; s. s. "Rhætia," in N. 42° 34', W. 50° 23', passed two large icebergs about one hundred to one hundred and fifty feet high; s. s. "Justitia," in N. 42° 15', W. 48° 04', passed a large iceberg with floating ice around it.

TEMPERATURE OF THE AIR.

[Expressed in degrees, Fahrenheit.]

The distribution of mean temperature over the United States and Canada for May, 1884, is exhibited on chart ii. by the dotted isothermal lines.

In the following table are shown the normal temperatures for May, the mean temperatures for May, 1884, and the departures from the normal, in the several geographical districts, as deduced from the records of the Signal Service:

Average temperatures for May, 1884.

Districts.	Average for May, Signal-Service observations.		Comparison of May, 1884, with the average for several years.
	For several years.	For 1884.	
New England.....	54.5	53.6	0.9 below.
Middle Atlantic states.....	51.1	51.9	0.8 above.
South Atlantic states.....	69.7	71.6	1.9 above.
Florida peninsula.....	76.9	78.1	1.2 above.
Eastern Gulf states.....	72.6	73.0	0.4 above.
Western Gulf states.....	73.6	72.2	1.4 below.
Rio Grande valley.....	80.6	78.4	2.2 below.
Tennessee.....	69.1	68.5	0.6 below.
Ohio valley.....	65.3	63.7	1.6 below.
Lower lake region.....	56.5	55.3	1.2 below.
Upper lake region.....	51.7	51.2	0.5 below.
Extreme northwest.....	53.0	53.5	0.5 above.
Upper Mississippi valley.....	62.0	61.8	0.2 below.
Missouri valley.....	61.4	60.1	1.3 below.
Northern slope.....	52.7	53.5	0.8 above.
Middle slope.....	61.4	58.4	3.0 below.
Southern slope.....	71.9	65.8	5.1 below.
Southern plateau.....	68.5	65.5	3.0 below.
Northern plateau.....	55.8	61.0	5.2 above.
North Pacific coast region.....	54.8	58.2	3.4 above.
Middle Pacific coast region.....	62.0	63.4	1.4 above.
South Pacific coast region.....	66.9	66.1	0.8 below.
Mount Washington, N. H.....	33.5	32.0	1.5 below.
Pike's Peak, Colo.....	22.1	20.4	1.7 below.
Salt Lake City, Utah.....	57.9	57.7	0.2 below.

The month was warmer than the average in the states bordering on the Atlantic south of New England, in the east Gulf states, north and middle Pacific coast regions, northern plateau, northern slope, and extreme northwest. In the districts above-named the mean temperature of May exceeded the normal, as follows: middle Atlantic and east Gulf states, extreme northwest and northern slope from 0°.4 to 0°.8; south Atlantic states, Florida peninsula, and middle Pacific coast region,

from 1°.2 to 1°.9; north Pacific coast region and northern plateau, from 3°.4 to 5°.2. In all other portions of the country the month was colder than the average, the deficiencies in the mean temperatures being less than 1° in southern California, the upper lake region, Tennessee, and the upper Mississippi valley, the average in the last-named districts being only 0°.2 below the normal. The most marked deficiencies occurred in the middle and southern slopes, and southern plateau, where they varied from 3° to 5°.

The following are some of the highest and lowest monthly mean temperatures reported from the Signal Service stations:

Stations reporting highest.	Stations reporting lowest.
Key West, Florida..... 80.9	Pike's Peak, Colorado..... 20.4
Rio Grande City, Texas..... 80.1	Mount Washington, New Hampshire... 32.0
Cedar Keys, Florida..... 77.0	Eastport, Maine..... 46.5
Brownsville, Texas..... 76.7	Marquette, Michigan..... 47.2
Jacksonville, Florida..... 75.5	Mackinaw City, Michigan..... 47.7
New Orleans, Louisiana..... 76.4	Alpena, Michigan..... 48.5
Savannah, Georgia..... 76.1	Duluth, Minnesota..... 48.9
Galveston, Texas..... 75.9	Escanaba, Michigan..... 49.1
Indianola, Texas..... 75.4	Deadwood, Dakota..... 49.2
Yuma, Arizona..... 75.3	Cheyenne, Wyoming..... 49.6
Charleston, South Carolina..... 74.8	Fort Maginnis, Montana..... 50.6
Mobile, Alabama..... 74.6	Buffalo, New York..... 52.1
Montgomery, Alabama..... 74.6	Fort Shaw, Montana..... 53.0

DEVIATIONS FROM MEAN TEMPERATURE.

The departures exhibited by the reports from the regular Signal Service stations are shown in the table of comparative temperatures for May, 1884. Voluntary observers report the following notes in connection with this subject:

Arkansas.—Lead Hill, Boone county: mean temperature, 67°.8, is 3°.1 above the May average of the last two years.

Dakota.—Webster, Day county: mean temperature, 57°.6, is 6°.2 above that for May, 1883.

Illinois.—Riley, McHenry county: mean temperature, 57°.0, is 0°.3 above the May average of the last twenty-three years. The mean temperature of the spring season of 1884, is 43°.3, or 0°.3 below the mean of the corresponding period of the last twenty-three years.

Swanwick, Perry county: mean temperature, 63°.5, is 0°.2 above the May average of the last three years.

Mattoon, Coles county: mean temperature, 66°.0, is 0°.5 above the May average of the last five years.

Anna, Union county: mean temperature, 65°.5, is 1°.7 below the May average of the last nine years.

Indiana.—Logansport, Cass county: mean temperature, 62°.0, is 2°.4 below the May average of the last twenty-five years. During that period the average maximum temperature was 91°.1, the highest being 99° in 1870 and 1881, and the lowest maximum, 83°, occurred in 1861. The average minimum temperature was 38°.6, the lowest being 28°, which occurred in 1876 and 1877.

Vevay, Switzerland county: mean temperature, 64°.4, is 1°.0 below the May average of the last twenty years.

Wabash, Wabash county: mean temperature, 61°.6, is 0°.5 below the May average of the last eight years.

Lafayette, Tippecanoe county: mean temperature, 59°.5, is 2°.9 below the May average of the four preceding years; the mean temperature of the spring of 1884, is 49°.3 or 0°.4 below the average of the corresponding seasons of the same period.

Kansas.—Independence, Montgomery county: mean temperature, 63°.8, is 2°.1 below the May average of the last thirteen years.

Lawrence, Douglas county: mean temperature, 62°.2, is 3°.6 below the May average of the last seventeen years.

Wellington, Sumner county: mean temperature, 60°.2, is 2°.9 below the May average of the last six years.

Maine.—Gardiner, Kennebec county: mean temperature, 51°.2, is 2°.3 below the May average of the last forty-eight years.

Maryland.—Fallston, Harford county: mean temperature, 60°.5, is 0°.4 below the May average of the last thirteen years.

Table of maximum and minimum temperatures for May, 1884.

State or Territory.	Signal Service.			U. S. Army Post Surgeons, or Voluntary Observers.		
	Station.	Max.	Min.	Station.	Max.	Min.
Alabama	Montgomery	93	59	Calera	98	50
Do	Mobile	93	59	Birmingham	96	41
Arizona	Yuma	104	49	Texas Hill	108	56
Do	Willcox	98	15	Pantano	90	40
Arkansas	Fort Smith	92	45	Lead Hill	93	46
Do	Little Rock	87	54	Prescott	88	34
California	Red Bluff	91	50	Mammoth Tank	113	62
Do	Fort Bidwell	86	29	Boca	68	30
Colorado	West Las Animas	90	28	Fort Lyon	91	17
Do	Pike's Peak	40	- 3	Fort Lewis	71	22
Connecticut	New Haven	85	32	Southington	91	26
Do	New London	83	35	Bethel	88	26
Dakota	Fort Buford	86	25	Fort Randall	89	33
Do	Fort Bennett	86	32	Fort Meade	82	25
Delaware	Del. Breakwater	81	46	West Washington	92	42
District of Columbia	Washington City	92	42	Waldo	101	58
Florida	Jacksonville	97	62	Live Oak	99	54
Do	Cedar Keys	90	60	Way Cross	103	54
Georgia	Savannah	90	58	Allapaha	96	45
Do	Augusta	90	54	Fort Lapwal	92	36
Idaho	Lewiston	92	39	Greenville	90	49
Do	Coeur d'Alene	85	23	Pelo	82	30
Illinois	Cairo	82	49	Veay	85	43
Do	Chicago	78	40	Sunman	89	34
Indiana	Indianapolis	84	41	Fort Reno	89	37
Do	Cantonment	90	36	Mount Vernon	88	41
Iowa	Dubuque	81	39	Cedar Rapids	82	33
Do	Des Moines	80	35	Allison	82	32
Kansas	Dodge City	87	32	Topeka	86	30
Do	Leavenworth	84	39	Frankfort	86	43
Kentucky	Louisville	89	46	Alexandria	95	45
Louisiana	Shreveport	91	56	Minden	89	51
Do	New Orleans	86	62	Cornish	83	38
Maine	Portland	83	39	Gardiner	75	32
Do	Eastport	73	34	Sandy Springs	92	38
Maryland	Baltimore	86	45	Westborough	91	38
Do	Ocean City	86	42	Pruceon	82	27
Massachusetts	Boston	88	35	Hudson	83	28
Do	Thatcher's Island	69	38	Swartz Creek	81	28
Michigan	Detroit	81	36	Hastings	84	32
Do	Alpena	80	30	Northfield	80	31
Minnesota	Moorehead	86	28	Meridian	97	51
Do	Saint Vincent	85	29	Dresden	90	43
Mississippi	Vicksburg	88	57	Oregon	83	32
Missouri	Saint Louis	86	44	Fort Assinaboine	88	27
Do	Fort Benton	88	30	Fort Ellis	82	20
Montana	Poplar River	84	24	Clear Creek	88	39
Do	North Platte	88	32	Red Willow	86	22
Nebraska	Omaha	83	36	Contoocook	85	32
Do	Mount Washington	55	12	Bristol	86	28
New Hampshire	Little Egg Harbor	90	41	Vineyard	92	42
Do	Sandy Hook	86	45	South Orange	88	40
New Jersey	Fort Craig	92	30	Fort Union	79	12
Do	Albany	85	39	Puerto de Luna	90	43
New York	Rochester	83	33	Ithaca	90	32
Do	Kitty Hawk	89	42	Dannemora	79	26
North Carolina	New River Inlet	86	46	Chapel Hill	94	43
Do	Sandusky	87	42	Brevard	88	49
Ohio	Toledo	82	36	Waverly	90	36
Do	Ashtabula	93	33	Junction	83	28.5
Oregon	Linkville	80	24	Albany	88	46
Do	Erle	86	37	Fort Klanath	82	21
Pennsylvania	Pittsburg	92	39	Easton	92	47
Do	Narragansett Pier	75	33	Troy	86	26
Rhode Island	Point Judith	70	34	Cheraw	96	46
Do	Charleston	91	60	Kingstree	95	46
South Carolina	Knoxville	89	46	Hurricane Switch	90	41
Do	Chattanooga	89	52	Kingston Springs	87	39
Tennessee	El Paso	103	40	Cuero	94	52
Do	Fort Elliott	90	36	Weatherford	86	43
Texas	Salt Lake City	84	36	Nephi	80	30
Do	Cape Henry	92	47	Woodstock	85	25
Utah	Lynchburg	91	45	Accotink	92	50
Vermont	Olympia	87	36	Variety Mills	90	37
Do	Fort Spokane	89	25	Pleasant Grove	85	32
Washington Territory	La Crosse	79	38	Fort Spokane	91	30
Do	Milwaukee	79	35	Helvetia	88	36
West Virginia	Cheney	80	22	Evansville	84	30
Wisconsin	Cheney	80	22	Neillsville	75	29
Do	Cheney	80	22	Fort Fred Steele	80	16
Wyoming	Cheney	80	22			

Massachusetts.—Worcester, Worcester county: mean temperature, 53°.7, is below the May average of a period of forty-five years.

Missouri.—Saint Louis, mean temperature, 64°.7, is 1°.6 below the normal of May.

New York.—Palermo, Oswego county: mean temperature, 52.4, is 0°.7 below the May average of the last thirty-one years.

Dannemora, Clinton county: mean temperature, 53°.8, is 0°.7 below the May average of the four preceding years.

Ohio.—Wauseon, Fulton county: mean temperature, 58°.3,

is 0°.5 below the May average of the last fourteen years. The highest May mean of that period, 64°.3, occurred in 1880; the lowest, 52°.2, occurred in 1882.

Pennsylvania.—Dyberry, Wayne county: mean temperature, 55°.3, is 0°.5 above the May average of the last eighteen years.

Texas.—New Uim, Austin county: mean temperature, 72°.2, is 2°.4 below the May average of the last twelve years.

Vermont.—Woodstock, Windsor county: mean temperature, 54°.2, is 0°.1 above the May average of the last seven years.

Virginia.—Wytheville, Wythe county: mean temperature, 62°.7, is 1°.9 below the May normal for a period of twenty-one years.

Variety Mills, Nelson county: mean temperature, 64°.4, is 0°.7 above the May average of the last seven years. The mean temperature of the spring of 1884 is 53°.7, or 0°.6 below the average of the corresponding period of the last seven years.

West Virginia.—Helvetia, Randolph county: mean temperature, 57°.8, is 0°.5 below the May average of the last eight years.

MONTHLY RANGES OF TEMPERATURE.

The monthly ranges of temperature were greatest in Oregon and Washington Territory (except along the immediate coast), and from Arizona, New Mexico, and western Texas, northward to British America; they were least along the coasts of the Gulf of Mexico and Pacific ocean.

Monthly ranges of 55° or more occurred at the following stations: Maricopa and Yuma, Arizona, and Dodge City, Kansas, 55°; Linkville, Oregon, Saint Vincent, Minnesota, and North Platte, Nebraska, 56°; Moorhead, Minnesota, 57°; Forts McDowell and Thomas, Arizona, Cheyenne, Wyoming, and Fort Benton, Montana, 58°; Fort Bidwell, California, and Poplar River, Montana, 59°; Ashland, Oregon, Fort Verde, Arizona, Fort Custer, Montana, and Fort Buford, Dakota, 60°; San Carlos, Arizona, 61°; Fort Craig, New Mexico, and Coeur d'Alene, Idaho, 62°; El Paso, Texas, and West Las Animas, Colorado, 63°; Phoenix, Arizona, 68°.

Monthly ranges of 33° and less occurred at the following stations: Fort Canby, and Neah Bay, Washington Territory, and Block Island, Rhode Island, 33°; Los Angeles, California, Indianola and Palestine, Texas, Hatteras, North Carolina, and Savannah, Georgia, 32°; San Francisco, California, Thatcher's Island, Massachusetts, Smithville, North Carolina, Chincoteague, Virginia, and Charleston, South Carolina, 31°; Vicksburg, Mississippi, Atlanta, Georgia, and Cedar Keys, Florida, 30°; Jacksonville, Florida, 28°; Cape Mendocino, California, 27°; Fort Macon, North Carolina, and Pensacola, Florida, 26°; Galveston, Texas, and San Diego, California, 25°; New Orleans, Louisiana, 24°; Key West, Florida, 20°.

GREATEST DAILY RANGES OF TEMPERATURE.

The greatest daily ranges of temperature varied in the several districts as follows:

New England.—From 21° at Block Island, Rhode Island, on the 25th, to 34° at Boston, Massachusetts, on the 2d.

Middle Atlantic states.—From 22° at Cape May, New Jersey, on the 5th, to 32° at New York City, on the 2d, and Washington City, District of Columbia, on the 18th.

South Atlantic states.—From 18° at Fort Macon, North Carolina, on the 4th, to 30° at Kitty Hawk, North Carolina, on the 1st.

Florida peninsula.—From 15° at Key West, on the 12th, to 19° at Cedar Keys, on the 21st.

East Gulf states.—From 16° at New Orleans, Louisiana, on the 9th, to 28° at Mobile and Montgomery, Alabama, on the 10th.

West Gulf states.—From 18° at Galveston, Texas, on the 9th, to 37° at Fort Smith, Arkansas, on the 9th.

Rio Grande valley.—From 25° at Brownsville, Texas, on the 10th, to 32° at Rio Grande City, Texas, on same date.

Tennessee.—From 29° at Nashville, on the 18th, to 32° at Knoxville, on the 31st.

Ohio valley.—From 23° at Cincinnati, Ohio, on the 9th, to 36° at Pittsburgh, Pennsylvania, on the 31st.

Lower lake region.—From 26° at Toledo and Cleveland, Ohio, on the 17th and 21st, respectively, to 40° at Erie, Pennsylvania, on the 1st.

Upper lake region.—From 24° at Grand Haven, Michigan, on the 5th, to 35° at Alpena, Michigan, on the 31st.

Extreme northwest.—From 35° at Bismarck, Dakota, on the 7th, to 42° at Fort Buford, Dakota, on the 23d.

Upper Mississippi valley.—From 23° at Saint Louis, Missouri,

Table of comparative maximum temperatures for the month of May.

State or Territory.	Maximum for May, 1884, Signal Service.		Maximum since Signal-Service stations were opened—3 to 13 years.			Highest from any other source.			
	Station.	Temperature.	Station.	Temperature.	Year.	Place.	Temperature.	Year.	Length of record.
Alabama	Montgomery	93	Montgomery	98	1875	Mount Vernon Arsenal	102	1880	34
Do	Mobile	93	Mobile	98	1875	Mobile	92	1880	35
Arizona	Maricopa	104	Maricopa Wells	105	1883	Fort Verde	111	1880	12
Do	Yuma	104	Yuma	109	1883	Fort Mojave	110	1880	11
Arkansas	Little Rock	87	Little Rock	91	1883	Washington, near	94	1880	28
Do	Fort Smith	92	Fort Smith	93	1883	Fort Smith	93	1880	21
California	Red Bluff	91	Los Angeles	100	1883	Fort Miller	113	1880	14
Do	Fort Bidwell	91	Visalia	101	1882	Fort Yuma	108	1880	24
Colorado	Denver	80	Denver	92	1874	Fort Lyon	99	1880	23
Do	Pike's Peak	40	Pike's Peak	47	1880	Fort Garland	93	1880	22
Connecticut	New Haven	85	New Haven	89	1880	New Haven	93	1880	48
Do	New London	83	New London	89	1881	Fort Trumbull	92	1880	19
Dakota	Fort Buford	86	Fort Sully	101	1874	Fort Abercrombie	102	1880	23
Do	Fort Bennett	86	Pembina	96	1874	Fort Randall	101	1880	45
Delaware	Delaware Breakwater	81	Delaware Breakwater	89	1880	Fort Delaware	91	1880	7
Do						Dover	96	1880	59
District of Columbia	Washington City	92	Washington City	96	1880	Washington City	96	1880	53
Florida	Jacksonville	91	Jacksonville	98.5	1878	Fort Barrancas	93	1880	4
Do	Key West	91	Saint Mark's	94	1874	Houston	100	1879, 1880	40
Georgia	Augusta	90	Augusta	100	1878	Oglethorpe Barracks	97	1878	37
Do	Savannah	90	Tybee Island	99	1878	Savannah	97	1880	10
Idaho	Boise City	83	Boise City	88	1881	Fort Lapwai	101	1880	38
Do	Lewiston	82	Lewiston	88	1881	Fort Boise	95	1880	2
Illinois	Cairo	82	Cairo	92	1874	Chicago	98	1881	13
Do	Chicago	78	Chicago	89	1874, 1881	Mattoon	98	1881	47
Indiana	Indianapolis	84	Indianapolis	89	1874, 1881	Logansport	98	1881	6
Do						Vevay	97	1880	30
Indian Territory	Cantonment	90	Fort Sill	97	1880	Fort Arbuckle	100	1880	4
Do	Fort Reno	90	Fort Gibson	94	1874, 1880	Fort Gibson	92	1880	23
Iowa	Dubuque	81	Dubuque	94	1874	Boonesborough	96	1880	53
Do	Des Moines	80	Des Moines	93	1880	Nora Springs	99	1876	18
Kansas	Dodge City	81	Dodge City	98	1879, 1880	Fort Larned	99	1880	43
Do	Leavenworth	80	Leavenworth	94	1874, 1875	Fort Riley	99	1880	29
Kentucky	Louisville	88	Louisville	93	1881	Newport Barracks	90	1880	3
Do						Bowling Green	99	1880	50
Louisiana	Shreveport	91	Shreveport	101	1875	Baton Rouge	92	1880	53
Do	New Orleans	86	New Orleans	92	1877	Fort Jesup	98	1880	37
Maine	Portland	83	Portland	94	1880	Brunswick	93	1880	38
Do	Eastport	73	Eastport	80	1877	Portland	93	1880	37
Maryland	Baltimore	89	Baltimore	95	1881	Fort Washington	97	1880	3
Do	Ocean City	86				New Market	97	1877	7
Massachusetts	Boston	88	Boston	97	1880	Somerset	97	1880	60
Do	Thatcher's Island	69	Springfield	94	1880	Williamstown	95	1880	38
Michigan	Marquette	72	Marquette	95	1881	Detroit	94	1880	11
Do	Detroit	81	Detroit	90.5	1881	Ontonagon	94	1880	16
Minnesota	Saint Paul	81	Saint Paul	91	1874	Fort Ripley	101	1880	55
Do	Moorhead	86	Breckenridge	93	1874	Fort Snelling	92	1880	5
Mississippi	Vicksburg	88	Vicksburg	95	1874, 1877	Brookhaven	92	1875	7
Missouri	Saint Louis	86	Saint Louis	93	1874	Corning	100	1875	40
Do						Saint Louis	97	1878	13
Montana	Fort Custer	84	Fort Keogh	98	1881	Fort Shaw	94	1880	12
Do	Fort Benton	88	Fort Benton	93	1875	Fort Benton	94	1880	5
Nebraska	North Platte	88	North Platte	94	1880	Fort McPherson	100	1879	5
Do	Omaha	83	Omaha	92	1880	Fort Calhoun	98	1880	2
Nevada	Winnemucca	86	Winnemucca	86	1881, 1882	Camp Halleck	104	1880	7
New Hampshire	Mount Washington	55	Mount Washington	62	1879, 1880	Auburn	96	1881	2
Do						Grafton	101	1880	1
New Jersey	Sandy Hook	86	Sandy Hook	93	1880	New Lisbon	98	1880	5
Do	Little Egg Harbor	90	Cape May	93	1875	New Brunswick	98	1880	25
New Mexico	Fort Craig	92	La Mesilla	101	1879, 1881	Fort McRae	109	1881	53
Do			Socorro	97	1880	Fort Craig	108	1880	40
New York	New York City	85	New York City	94	1880	West Point	101	1880	7
Do	Oswego	83	Oswego	94	1879	Newburg	98	1880	57
North Carolina	Wilmington	89	Wilmington	95	1878	Weldon	100	1880	42
Do	Kitty Hawk	89	Kitty Hawk	93	1880	Fort Johnson	92	1877, 1881	53
Ohio	Cincinnati	85	Cincinnati	94	1874, 1875	Cincinnati	96	1880	53
Do	Cleveland	84	Cleveland	92	1879	Marietta	94	1880	5
Oregon	Ashland	93	Umatilla	95.5	1882	Fort Dalles	96	1880	120
Do	Portland	90	Portland	96	1878	Fort Haskins	95	1880	2
Pennsylvania	Philadelphia	88	Philadelphia	96	1880	Philadelphia	98	1880	35
Do	Pittsburg	92	Pittsburg	95	1881	Milton	100	1881	40
Rhode Island	Block Island	72	Newport	85	1881	Providence	91	1880	105
Do	Narragansett Pier	75	New Shoreham	78	1881	Fort Adams	91	1880	6
South Carolina	Charleston	91	Charleston	94	1878	Charleston	94	1881	4
Do						Aiken	97	1881	3
Tennessee	Knoxville	89	Memphis	96	1879	Humboldt	98	1880	34
Do	Nashville	88	Nashville	93	1874, 1879	Ashwood	96	1879	15
Texas	El Paso	103	Eagle Pass	116	1879	Fort Ringgold	123	1879	16
Do	Rio Grande City	101	Uvalde	113	1879	Fort Stockton	111	1879	9
Utah	Salt Lake City	84	Salt Lake City	91	1874	Fort Douglas	97	1876	3
Do						Mount Carmel	96.4	1876	7
Vermont			Burlington	91	1880	Charlotte	96	1878	16
Do						Lunenburg	88	1880	12
Virginia	Norfolk	91	Norfolk	98	1880	Alexandria	96	1880	6
Do	Lynchburg	91	Lynchburg	96	1881	Accotink	97	1880, 1881	14
Washington Territory	Dayton	72	Dayton	90	1880	Fort Walla Walla	99	1880	19
Do	Olympia	87	Olympia	87	1878	Fort Vancouver	98	1880	2
West Virginia			Morgantown	91	1875	Weston	100	1877	5
Do						Helvetia	90	1877	14
Wisconsin	La Crosse	79	La Crosse	96	1874	Embarra	98	1880	31
Do	Milwaukee	79	Milwaukee	90	1874	Fort Howard	97	1880	27
Wyoming	Cheyenne	80	Cheyenne	88	1874	Fort Laramie	98	1880	

on the 30th, to 33° at Des Moines, Iowa, and Saint Paul, Minnesota, on the 16th, and at Dubuque, Iowa, on the 30th.

Missouri valley.—From 29° at Leavenworth, Kansas, on the 19th, to 44° at Fort Bennett, Dakota, on the 15th.

Northern slope.—From 30° at Helena, Montana, on the 2d, to 45° at Fort Benton, Montana, on the 14th.

Middle slope.—From 24° on the summit of Pike's Peak, Colorado, on the 28th, and 33° at Denver, Colorado, on the 9th, to 50° at West Las Animas, Colorado, on the 9th.

Southern slope.—From 39° at Fort Concho, Texas, on the 6th, to 46° at Fort Stockton, Texas, on the 17th.

Southern plateau.—From 28° at Fort Grant, Arizona, on the 3d, to 48° at El Paso, Texas, and Fort Thomas, Arizona, on the 6th and 7th, respectively.

Middle plateau.—30° at Salt Lake City, Utah, on the 8th.

Northern plateau.—From 30° at Boise City, Idaho, on the 23d, to 40° at Dayton, Washington Territory on the 30th.

North Pacific coast region.—From 23° at Fort Canby, Washington Territory on the 29th, to 44° at Olympia, Washington Territory on the 30th.

Middle Pacific coast region.—From 21° at San Francisco, California, on the 8th, to 34° at Red Bluff, California, on the 17th.

South Pacific coast region.—From 18° at San Diego, California, on the 2d to 41° at Yuma, Arizona, on the 8th.

FROSTS.

Frosts occurred in the various districts on the following dates:

New England.—4th, 6th, 13th, 15th, 17th, 21st, 22d, 28th to 31st. On the summit of Mount Washington, 2d, 3d, 4th, 7th, 8th, 10th to 18th, 28th, 29th, 30th.

Middle Atlantic states.—3d, 4th, 12th, 13th, 15th to 18th, 29th, 30th, 31st.

South Atlantic states.—Highlands, North Carolina, 30th; Raleigh, North Carolina, 29th, 30th, 31st.

Ohio valley.—3d, 10th, 12th, 14th, 16th, 29th, 30th.

Lower lake region.—2d, 3d, 12th to 18th, 28th, 29th, 30th.

Upper lake region.—2d, 3d, 11th, 13th to 18th, 20th, 26th, 28th, 29th, 30th.

Extreme northwest.—1st, 2d, 3d, 5th, 12th, 14th, 18th, 20th.

Upper Mississippi valley.—2d, 3d, 8th, 11th, 12th, 14th, 16th, 20th, 28th, 29th, 30th.

Missouri valley.—1st, 2d, 3d, 5th, 6th, 8th, 11th, 12th, 13th, 15th, 27th, 29th, 30th.

Northern slope.—1st to 7th, 12th, 14th, 21st.

Middle slope.—2d, 3d, 5th to 8th, 14th, 19th; on the summit of Pike's Peak, 7th, 15th, 18th, 19th, 24th, 26th, 27th.

Southern plateau.—2d to 5th, 16th, 21st, 23d.

Middle plateau.—Nephi, Utah, 4th.

Northern plateau.—Boise City, Idaho, 1st, 4th.

North Pacific coast region.—Roseburg, Oregon, 4th; Olympia, Washington Territory, 28th, 29th.

Middle Pacific coast region.—Hydesville, California, 4th, 6th.

The frosts which occurred from the 28th to 31st during the prevalence of high area vii. were very destructive in the lake region, New England, and the northern part of the middle Atlantic states, as will be seen from the following reports:

Connecticut.—New Haven: the frost of the 29–30th caused a large amount of damage in New Haven county, nearly all crops being totally ruined. It is estimated that the damage done in this state will approximate \$1,000,000.

Delaware.—Wilmington, 30th: the peach crop on the peninsula is reported to have suffered no injury from the recent cold weather.

Illinois.—Rockford, Winnebago county: garden vegetables and grape vines were injured by the frosts of the 29th.

Galena, Jo Daviess county: a severe frost occurred on the morning of the 29th; the fruit buds were destroyed to a great extent, and corn and potatoes were badly damaged.

Sandwich, DeKalb county: there was a heavy frost on the morning of the 29th, which caused damage in some localities.

Woodstock, McHenry county: a severe frost, causing injury to vegetables, occurred on the night of the 15–16th. During the night of the 28–29th this region was visited by the severest frost that has occurred for many years at so late a date; garden vegetables suffered severely; ice formed to a thickness of one-eighth inch.

Mount Carroll, Carroll county: a heavy frost occurred on the morning of the 16th; thin ice formed.

Indiana.—Fort Wayne, Allen county: the heavy frost on the night of the 28–29th did serious injury to vegetables.

South Bend, Saint Joseph county: the frost on the morning of the 29th was very severe throughout this county and damaged all early vegetation.

Plymouth, Marshall county: the frost of the 29th caused no injury in this county.

Muncie, Delaware county: frost occurred on the 29th, but owing to the late planting no serious injury was done.

Wabash, Wabash county: a light frost occurred on the night of the 28–29th, but caused no damage.

La Fayette, Tippecanoe county: a light frost occurred on the 29th; corn was slightly injured in some localities, and early vegetables were considerably damaged.

Angola, Steuben county: a heavy frost occurred during the night of the 28–29th, doing considerable damage to early corn, potatoes and other vegetables.

Iowa.—Guttenberg, Clayton county: the frost of the 29th was very severe in Turkey river valley; corn, potatoes and other vegetables were destroyed.

Manchester, Delaware county: the frosts on the 29th and 30th killed tender vegetables.

Preston, Jackson county: considerable damage was done by the frost on the 29th.

Charles City, Floyd county: a light frost occurred in this vicinity on the 29th; but little damage was done.

Des Moines: a light frost occurred in the bottom lands on the 29th.

Waterloo, Black Hawk county: frost occurred in this section on the 29th, causing no serious injury. Reports from Franklin, Hardin, Bremer, Buchanan and Butler counties state that light frost occurred in those localities with possible damage to fruit on lowlands.

Iowa City, Johnson county: the frost of the 29th was quite general, but the damage slight.

Dubuque: farmers from surrounding counties report that the frost on the 29th caused some injury to corn and vegetables.

Brooklyn, Poweshiek county: the heavy frost on the morning of the 30th, ruined several thousand acres of corn in the lowlands in this county.

Kentucky.—Louisville: the tobacco crop is reported to have been injured by the cold weather of the 29th.

Maine.—Gardiner, Kennebec county: vegetation was badly damaged by the cold weather of the 31st.

Portland: the frost of the 31st caused considerable damage to the gardens in this vicinity.

Rockland, Knox county: a severe frost occurred on the morning of the 30th, but the crops were not sufficiently advanced to sustain serious injury.

Bangor: the heavy frost on the morning of the 30th caused slight injury to the crops in this vicinity.

Maryland.—Ocean City, Worcester county: corn and sweet potatoes were damaged by frost on the 29th.

Massachusetts.—Taunton, Bristol county: the damage resulting from the frosts of the 30th and 31st in this county alone is estimated at \$100,000.

Amherst, Hampshire county: great damage was done by the frost of the 30th.

Somerset, Bristol county: the frost on the 30th was very destructive.

Westfield, Hampden county: all early vegetables were destroyed by the frost on the night of the 29–30th.

Athol, Worcester county: ice formed to a thickness of one-fourth inch on the morning of the 30th.

Boston: during the night of the 29-30th, the ground froze to a depth of from one-fourth to one-half inch throughout New England; incalculable damage was done to crops.

Great Barrington, Berkshire county: a very heavy frost, causing great damage to vegetation, occurred during the night of the 29-30th; the temperature fell to 22°.

Michigan.—**Swartz creek, Genesee county:** the frost of the 29th did great damage to garden vegetables; apples and cherries were nearly all killed.

Port Huron: great damage was done by the heavy frost of the 29th.

Grand Rapids, Kent county: a severe frost occurred on the night of the 28-29th; vegetables in the lowlands suffered serious injury.

Niles, Berrien county: a light frost occurred on the morning of the 16th; tender vegetation was injured.

Corunna, Shiawassee county: the heavy frost on the night of the 28-29th killed vegetables and caused injury to the fruit crops.

Ann Arbor, Washtenaw county: the frost of the 29th ruined the corn, grape and strawberry crops in this section.

Lapeer, Lapeer county: a severe frost damaging garden vegetables occurred during the night of the 28-29th; ice formed to a thickness of one-fourth inch.

Hudson, Lenawee county: the frost on the morning of the 29th killed nearly all of the garden vegetables and fruit in this vicinity.

Marshall, Calhoun county: a severe frost injuring the growing crops, occurred during the night of the 28-29th.

Richmond, Macomb county: the frost on the morning of the 29th caused a large amount of damage to fruit and vegetables in this vicinity.

Kalamazoo, Kalamazoo county: great damage was done to crops in lowlands by the frost on the morning of the 29th.

New Hampshire.—**Antrim, Hillsborough county:** the frosts of the 29th and 30th were the severest occurring at so late a date for several years; heavy damage was sustained by farmers.

Hanover, Grafton county: the ground froze hard during the night of the 30-31st; early fruit was seriously injured.

Dover, Strafford county: nearly all of the corn, potatoes, and other crops were killed by the frost of the 30th.

Petersborough, Hillsborough county: the severe frost on the morning of the 30th killed fruit and all early vegetables.

Keene, Cheshire county: the frost on the night of the 29-30th destroyed a large per cent. of the early potatoes and corn.

New Jersey.—**Cape May:** the crops throughout this section are reported to have been much injured by the cold weather of the 29th and 30th.

New York.—**Cooperstown, Otsego county:** severe frosts occurred on the mornings of the 29th, 30th, and 31st, the temperature falling to 28°.

Menand Station (near Albany): the frost of the 30th was the severest known to occur in May for the last forty years; fruit and vegetables in many localities were entirely destroyed.

Rochester: a destructive frost occurred on the 30th; great damage was done to the tomatoes, fruit, and young corn in the adjoining counties.

Albany: the frosts of the 29th and 30th were destructive to vegetation.

Minetto, Oswego county: a severe frost, killing corn and potatoes, occurred on the 30th.

Demster, Oswego county: it is estimated that one-third of the strawberry crop in this locality was destroyed by the frost of the 30th.

Troy, Rensselaer county: the heavy frost on the morning of the 30th injured fruit and vegetables; in some localities ice formed to a thickness of three-fourths of an inch.

Poughkeepsie: on the morning of the 30th the thermometer fell to 25°. In Dutchess and Ulster counties the grape crop was fully one-half destroyed, the damage being estimated at more than \$100,000.

Port Jervis, Orange county: a heavy frost occurred throughout this section on the morning of the 30th; the grape vines and fruit trees in many cases were ruined.

Montgomery, Orange county: thick ice formed on the lowlands on the morning of the 30th.

Attica, Wyoming county: the frost on the morning of the 29th caused considerable damage to early vegetables.

Ellicottsville, Cattaraugus county: the frost on the 29th caused great damage to the fruit crops.

Wellsville, Allegheny county: corn and potatoes were badly damaged by the frost on the night of the 28-29th.

Fredonia, Chataqua county: young vegetation suffered serious injury by the cold weather of the 29th.

Sag Harbor, Long Island: the heavy frost on the night of the 29-30th, caused much damage throughout the island. The damage to the strawberry crop is estimated at \$50,000. All of the ponds were covered with thin ice.

Ohio.—**Columbus:** the heavy frost on the 29th caused slight injury to tender plants.

Sandusky: a damaging frost occurred on the 29th.

Upper Sandusky, Wyandot county: a heavy frost occurred on the morning of the 29th, causing much damage to crops.

Massillon, Stark county: the severe frost on the 29th did great damage to crops in this section.

Findlay, Hancock county: a severe frost occurred on the 29th which damaged the corn crop and killed early vegetables.

Lima, Allen county: the frost of the 29th damaged small fruit and early vegetables.

Coshocton, Coshocton county: a heavy frost, causing considerable damage to fruit and vegetables, occurred on the morning of the 29th.

Province of Ontario.—**Toronto:** the frost on the night of the 29-30th caused a large amount of damage throughout Canada.

Pennsylvania.—**Quakertown, Bucks county:** frosts occurred on the 12th, 18th, 29th and 30th, which injured garden vegetables, etc.

Grampian Hills, Clearfield county: the frosts on the 29th and 30th caused injury to fruit and other vegetation.

Wellsborough, Tioga county: the frosts of the 29th and 30th were very destructive; fruit and vegetables were entirely destroyed and growing grain was materially injured; the temperature fell to 26° on the 30th; the damage in this county is estimated at from \$10,000 to \$15,000.

Dyberry, Wayne county: much injury was done by the frosts of the 29th and 30th.

Pittsburg: fruit and vegetables in eastern Ohio and western Pennsylvania were severely damaged by the frosts on the 29th and 30th.

Rhode Island.—**Narragansett Pier:** farmers in this vicinity report heavy damage to corn and vegetables by the frost of the 30th.

Point Judith: heavy frost occurred on the 30th; minimum temperature, 33°.8; much damage to crops.

Pawtucket: a heavy frost occurred along the Blackstone river on the morning of the 30th; ice formed to a thickness of one-half inch; fruit and vegetables were badly damaged.

Providence: the frost of the 30th caused serious damage to crops in this state.

Vermont.—**Woodstock, Windsor county:** the temperature fell to 25° on the morning of the 31st; all garden vegetables were killed; the ground froze to a depth of one inch.

West Virginia.—**Helvetia, Randolph county:** the frost on the 29th and 30th damaged corn, potatoes, and other vegetables.

Wisconsin.—**Milwaukee:** a destructive frost occurred on the 29th; potatoes and other vegetables were killed and the fruit crop was seriously injured.

Elkhorn, Walworth county: early vegetables were damaged by the frost on the 29th, but the fruit crop sustained no material injury.

Janesville, Rock county: the heavy frosts on the mornings of the 16th and 30th caused great damage to fruit and crops in the lowlands of this region.

Fort Atkinson, Jefferson county: a severe frost occurred on the 30th, but no serious damage resulted in this locality.

Palmyra, Jefferson county: a heavy frost, killing all early vegetation, occurred during the night of the 15th-16th.

Darlington, La Fayette county: the frost of the 29th was very severe in this locality; fruit and vegetables were badly damaged.

White Water, Walworth county: the frost on the night of 28-29th damaged the corn, barley and potato crops; all vegetables in lowlands were destroyed.

ICE.

Ice formed during May as follows:

Connecticut.—Bethel and Southington, 30th; one-half inch thick.

Indiana.—Wabash, 29th.

Iowa.—Guttenberg, 29th.

Maine.—Portland, 7th, 29th; Gardiner, 17th, 31st; Eastport, 30th.

Massachusetts.—Dudley, 29th, Heath, and Rowe, 29th, 30th, 31st; Fall River, 30th; Cambridge, 31st.

Michigan.—Detroit, 29th; Port Huron, 29th.

Nebraska.—Clear Creek, 2d.

New Jersey.—Readington, 29th.

New York.—Dannemora, 28th, 29th; Humphrey, and Buffalo, 29th; Albany, and Menand Station (near Albany), 30th, one half inch thick.

Ohio.—Columbus, Cleveland, Wauseon, and Garrettsville, 29th.

Pennsylvania.—Easton, and Pittsburg, 29th; Dyberry, and Grampian Hills, 29th, 30th; State College, and Wellsboro', 30th.

Rhode Island.—Block Island, Narragansett Pier, and Point Judith, 30th.

Vermont.—Strafford, 15th, 29th, 30th.

Wisconsin.—Milwaukee, 29th, from one-eighth to one-fourth inch thick.

PRECIPITATION.

[Expressed in inches and hundredths.]

The distribution of rainfall over the United States and Canada, for May, 1884, as determined from the reports of nearly eight hundred stations, is exhibited on chart iii.

In the first column of the following table is shown the average precipitation for May in each of the various districts, for several years, as determined from observations made at the Signal Service stations; in the second column are given the averages for May, 1884; and the third column shows the excess or deficiency of May, 1885, as compared with the average:

Average precipitation for May, 1884.

Districts.	Average for May. Signal-Service ob- servations.		Comparison of May, 1884, with the av- erage for sev- eral years.
	For sev- eral years.	For 1884.	
	Inches.	Inches.	Inches.
New England.....	3.61	4.39	0.78 excess.
Middle Atlantic states.....	2.77	2.31	0.46 deficiency.
South Atlantic states.....	3.42	2.83	0.59 deficiency.
Florida peninsula.....	3.63	2.55	1.08 deficiency.
Eastern Gulf states.....	4.83	5.14	0.31 excess.
Western Gulf states.....	5.03	9.40	4.37 excess.
Rio Grande valley.....	2.68	5.50	2.82 excess.
Tennessee.....	3.84	3.62	0.22 deficiency.
Ohio valley.....	3.60	4.66	1.06 excess.
Lower lake region.....	3.10	3.14	0.04 excess.
Upper lake region.....	3.25	3.00	0.25 deficiency.
Extreme northwest.....	3.35	2.14	1.21 deficiency.
Upper Mississippi valley.....	4.62	3.46	1.16 deficiency.
Missouri valley.....	4.46	2.59	1.87 deficiency.
Northern slope.....	2.90	1.80	1.10 deficiency.
Middle slope.....	4.28	5.13	0.85 excess.
Southern slope.....	2.01	5.41	3.40 excess.
Southern plateau.....	0.29	0.50	0.21 excess.
North Pacific coast region.....	1.37	0.70	0.67 deficiency.
Middle Pacific coast region.....	0.99	0.16	0.83 deficiency.
South Pacific coast region.....	0.29	1.00	0.71 excess.
Mount Washington, N. H.....	4.39	9.54	5.15 excess.
Pike's Peak, Colo.....	3.61	2.90	0.71 deficiency.
Salt Lake City, Utah.....	2.40	1.78	0.62 deficiency.

The precipitation for May, 1884, exceeded the average in New England, the Ohio valley, middle slope, and over the southern part of the country from the Gulf states westward to the Pacific coast. In the western Gulf states and Rio Grande valley, the monthly precipitation was nearly double the May average, and in the southern slope it was nearly three times as great as the average; in the lower lake region it was normal; on the Atlantic coast south of New England, in Tennessee, and in the northern districts, from the upper Mississippi valley and upper lake region, westward to the Pacific coast it was below the average, the deficiencies ranging from 1.10 to 1.87 from Illinois and Missouri northwestward to Minnesota, Dakota, and Montana; in the northern plateau, north and middle Pacific coast regions it was less than one-half the average amount for May.

Table of excessive and greatest monthly precipitation.—May, 1884.

Station.	Specially heavy.		Largest monthly.	Amount.	Station.	Specially heavy.		Largest monthly.	Amount.
	Date.	Amt.				Date.	Amt.		
Alabama.					Missouri.				
Mobile.....	4, 5	2.20	8.48		Pierce City.....	13	3.50		
Do.....	25, 26	2.96			Nebraska.				
Arkansas.					Fort Robinson.....	21	2.00		
Mount Ida.....	1	2.50	10.25		New Hampshire.				
Do.....	20	2.25			Mt. Washington.....	20, 21	3.17	9.54	
Texarkana.....	2	2.46	7.49		New Jersey.				
Do.....	19, 20	3.65			Sandy Hook.....	6, 7	2.01		
Little Rock.....	3, 4	2.25	7.37		South Orange.....	10	2.25		
Prescott.....	3	4.00	6.28		New Mexico.				
Lead Hill.....	1	2.69			Fort Union.....	31	2.85		
Pine Bluff.....	14, 15	4.05			New York.				
Madison.....	22	2.50			Dannemora.....			6.62	
Colorado.					New York City.....	6, 7	2.20		
West Las Animas.....	23	2.12			Fort Columbus.....	8	2.08		
Connecticut.					David's Island.....	8	2.28		
New London.....	6, 7	2.19			North Carolina.				
Dakota.					Charlotte.....	17	2.17		
Webster.....	21	4.01	9.19		Ohio.				
Do.....	23	2.95			Sidney.....			6.27	
Fort Meade.....	19, 20	3.17	8.58		Canal Dover.....	27	2.15		
Florida.					Pennsylvania.				
Fort Barrancas.....	5	8.15	9.75		Wellsborough.....	6	2.60?	9.36?	
Pensacola.....	4, 5	4.01	6.64		Do.....	20	2.16?		
Waldo.....			6.55		Do.....	27	2.80?		
Jacksonville.....	29	2.02			Blooming Grove.....	26	2.00		
Illinois.					Rhode Island.				
Greenville.....			7.89		Block Island.....	6, 7, 8	4.57	6.39	
Mascottah.....			7.70		Point Judith.....	7, 8	2.04		
Swanwick.....	1	2.03			Narragansett Pier.....	7, 8	2.35		
Peoria.....	12	2.25			South Carolina.				
Indiana.					Chester.....	25	2.01		
Lacomb.....	4	2.10			Florence.....	25	2.99		
Indian Territory.					Yemassee.....	25, 26	3.90		
Cantonment.....	29, 30	4.05	6.95		Tennessee.				
Fort Reno.....	15	2.90	6.97		Trenton.....			8.64	
Kansas.					Bolivar.....			7.16	
Allison.....	22	2.86	9.04		Memphis.....			6.46	
Fort Scott.....	1	2.75	9.03		Milan.....	4	3.58		
Do.....	18	4.89			Brownsville.....	4, 5	3.02		
Sherlock.....	29	2.02	7.94		Texas.				
Elk Falls.....	20	2.50			Weatherford.....	1	4.00?	27.94?	
Kentucky.					Do.....	3	3.99?		
Louisville.....	4	2.10			Do.....	14, 15, 16	7.11?		
Louisiana.					Do.....	20, 21	12.85?		
Shreveport.....	3, 4	3.47	14.47		Tyler.....	3	4.00	17.47	
Do.....	21, 22	7.62			Do.....	21, 22	6.00		
Grand Coteau.....	15	2.50	14.03		Palestine.....	1, 2, 3	6.62	17.25	
Do.....	15	3.37			Do.....	20, 21, 22	7.55		
Do.....	20	2.06			New Uln.....	3	4.40	15.25	
Do.....	22	2.31			Do.....	22	2.19		
Whiteville.....	18	2.18	11.34		Huntsville.....	1	2.15	13.65	
Do.....	22	2.15			Do.....	3, 4	2.65		
Do.....	25, 26	2.34			Do.....	21 to 24	7.37		
Minden.....	3	2.27	9.64		Fort Concho.....	20, 21	3.14	13.50	
Do.....	21, 22	4.75			Do.....	26, 27	5.25		
Monroe.....	22	2.94			Barnesville.....	21	2.50		
Cheneyville.....			9.59		Do.....	21	3.00		
Natchitoches.....	22	2.03	8.75		Do.....	22	3.00		
Opelousas.....			8.29		Do.....	21, 22	5.13	9.66	
Alexandria.....	16	2.15	7.28		Clarksville.....	1	2.70	9.53	
Maine.					Do.....	21	3.02		
Eastport.....	8, 9	2.14	6.79		Paris.....	1	2.20	8.80	
Portland.....	20, 21	1.96	6.46		Do.....	3	2.01		
Maryland.					Do.....	21	2.09		
Emmitsburg.....	7	2.25	7.19		Galveston.....	3, 4	2.31	8.42	
Do.....	14	2.00			Dallas.....	20, 21	4.91	8.25	
Massachusetts.					Indianola.....	3, 4	3.76	7.94	
Fall River.....	8	2.00			Do.....	22	2.03		
Minnesota.					Austin.....	1	2.32	7.85	
Duluth.....	21, 22	4.02			Cuero.....	3	3.39	6.89	
Mississippi.					Honey Grove.....	21	2.50	6.80	
Brookhaven.....	5	2.32	11.83		Fort Elliott.....	29	2.75	6.29	
Do.....	14, 15	2.77			Fort Stockton.....	7	2.69		
Do.....	24	2.10			Rio Grande.....	19	2.00		
Vicksburg.....	2	2.40	11.76		Cleburne.....	21	2.09		
Do.....	20	2.11			Vermont.				
Edwards.....	2	3.80	9.84		Newport.....			6.79	
Natchez.....	2	2.02	7.63		Washington Territory				
Lake.....			7.08		Neah Bay.....	2 to 6	5.60	6.20	
Jackson.....	2	2.71	6.08						
Hernando.....	4	2.62							